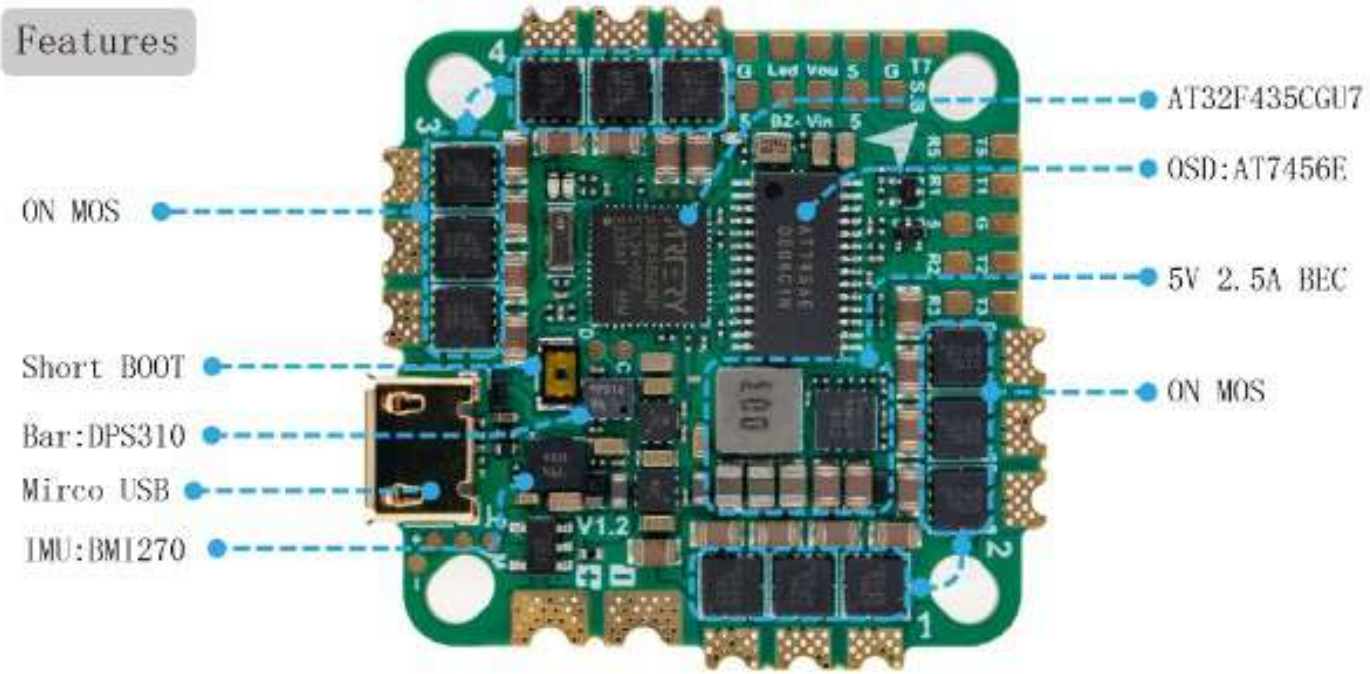
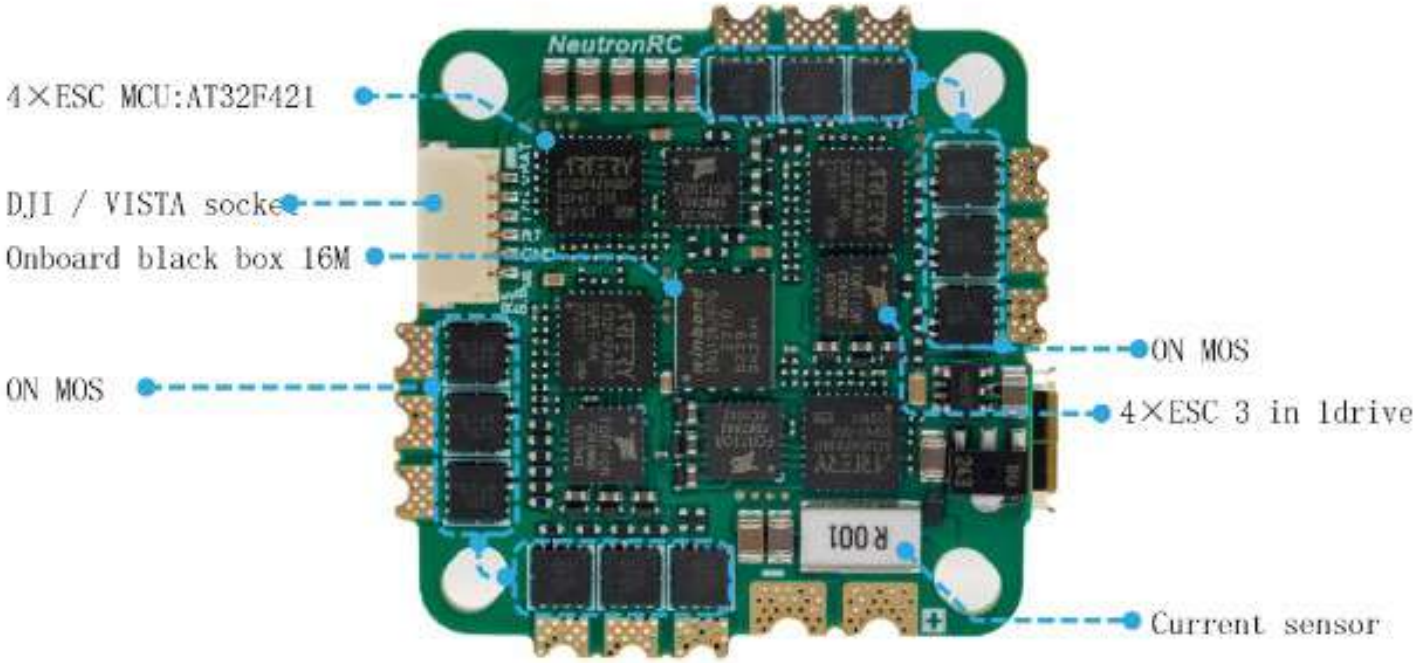
Features





1. MCU: AT32F435CGU7 ,@288M Hz,1MB Flash
2. IMU: BMI270 (SPI1) CW=0,YAW = -45
3. OSD: AT7456E (SPI2)
4. Blackbox: SPI=2 Flash 16M
5. Baro: Infineon DPS310(I2C1)
6. 5xUarts(1,2,3,5,7)&1x I2C
7. BEC: 5V 2.0A(Max 2.5A)
8. Support Betaflight(NEUTRONRCF435MINI)
9. Current sensor (Scale 100)&Voltage sensor (Scale 110)
10. 3x LEDs for FC Status & 3.3V and 5V
11. ESCMCU: AT32F421 120MHz (AM32/HF32 Firmware)
12. FD6288 3in1 driver
13. SH1.0-6pin,DJI/Vista straight plug
14. ONSemi Industrial MOS, low internal resistance and high current
15. Current 45Ax4 ,Max 60A(5S)
16. ESC Firmware: AM32(AM32 AT32DEV F421)
17. 8-layer 2OZ, 2-order blind via PCB.

Target:

- ATbeatflight Firmware: NEUTRONRCF435MINI
- INAV Firmware: NEUTRONRCF435MINI
- QUICKSILVER Firmware: NEUTRONRCF435MINI

Mechanical and Electrical Specs

- Input Voltage: 3-5S(35A/55A),3-6S(45A)
- Mounting: 25.5x25.5mm w/M3 Grommets
- Size: 34x34x7mm
- Weight:8g

Default UART Configuration

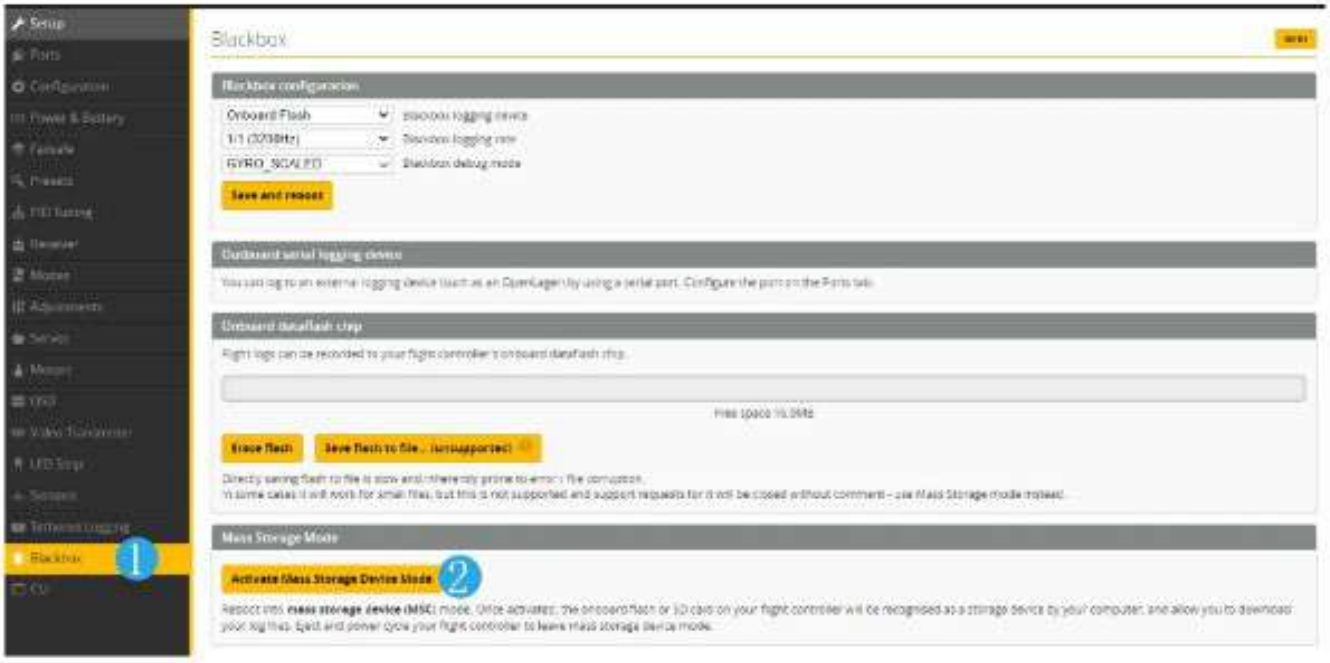
UART 1: NC
UART 2: NC
UART 3: NC
UART 5: S.BUS(DJI /VISTA/03)
UART 7: DJI/VISTA

Default port

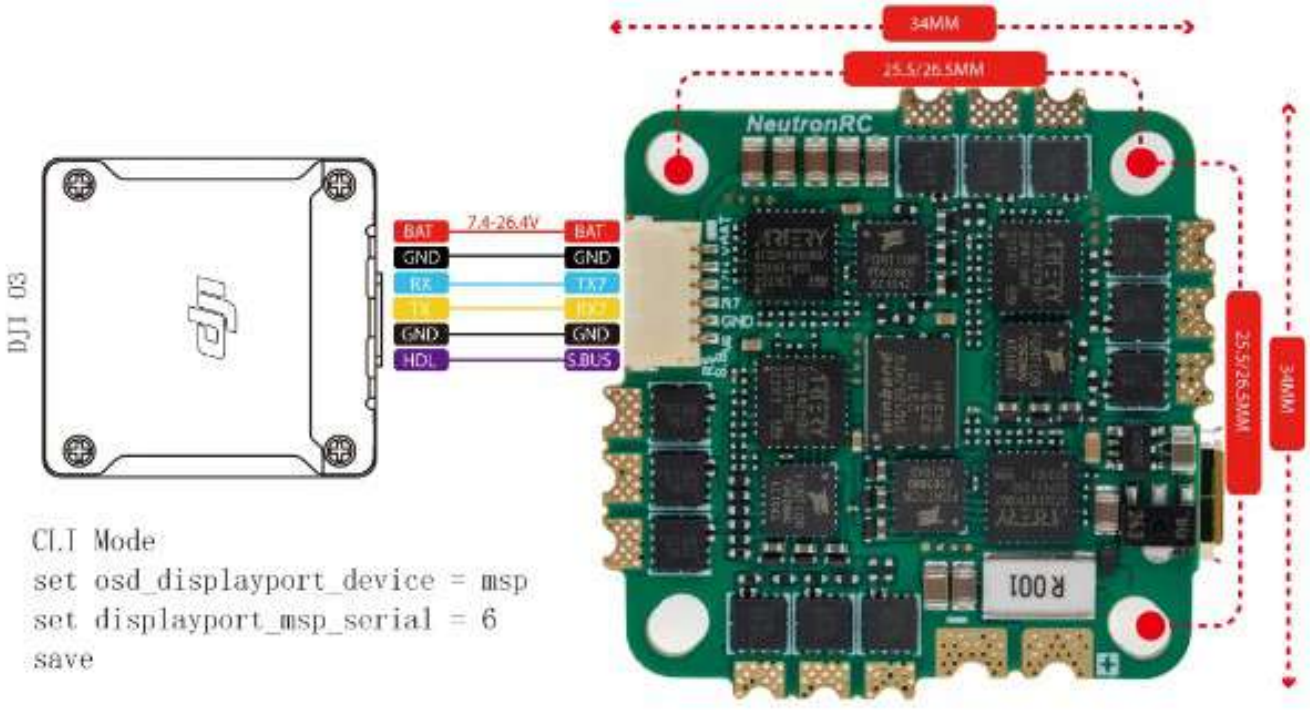
Identifier	Configuration/MSP	Serial Rx	Telemetry Output	Sensor Input	Peripherals
USB VCP	115200		Disabled AUTO	Disabled AUTO	Disabled AUTO
UART1	115200		Disabled AUTO	Disabled AUTO	Disabled AUTO
UART2	115200		Disabled AUTO	Disabled AUTO	Disabled AUTO
UART3	115200		Disabled AUTO	Disabled AUTO	Disabled AUTO
UART5	115200		Disabled AUTO	Disabled AUTO	Disabled AUTO
UART7	115200		Disabled AUTO	Disabled AUTO	Disabled AUTO

Read black box data

Select the black box option activate mass storage device mode



DJI digital image transmission system



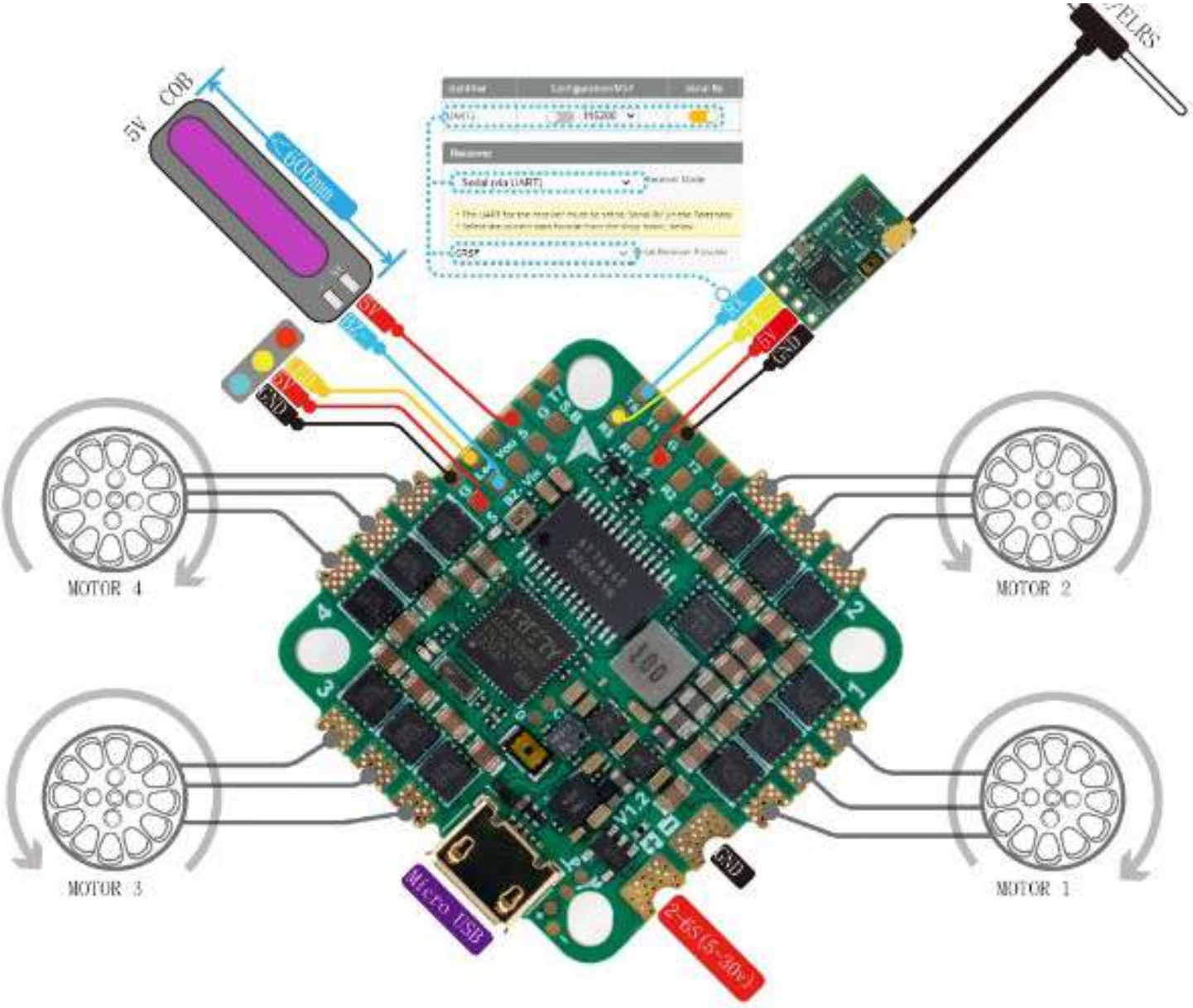
CLI Mode

```
set osd_displayport_device = msp
set displayport_msp_serial = 6
save
```

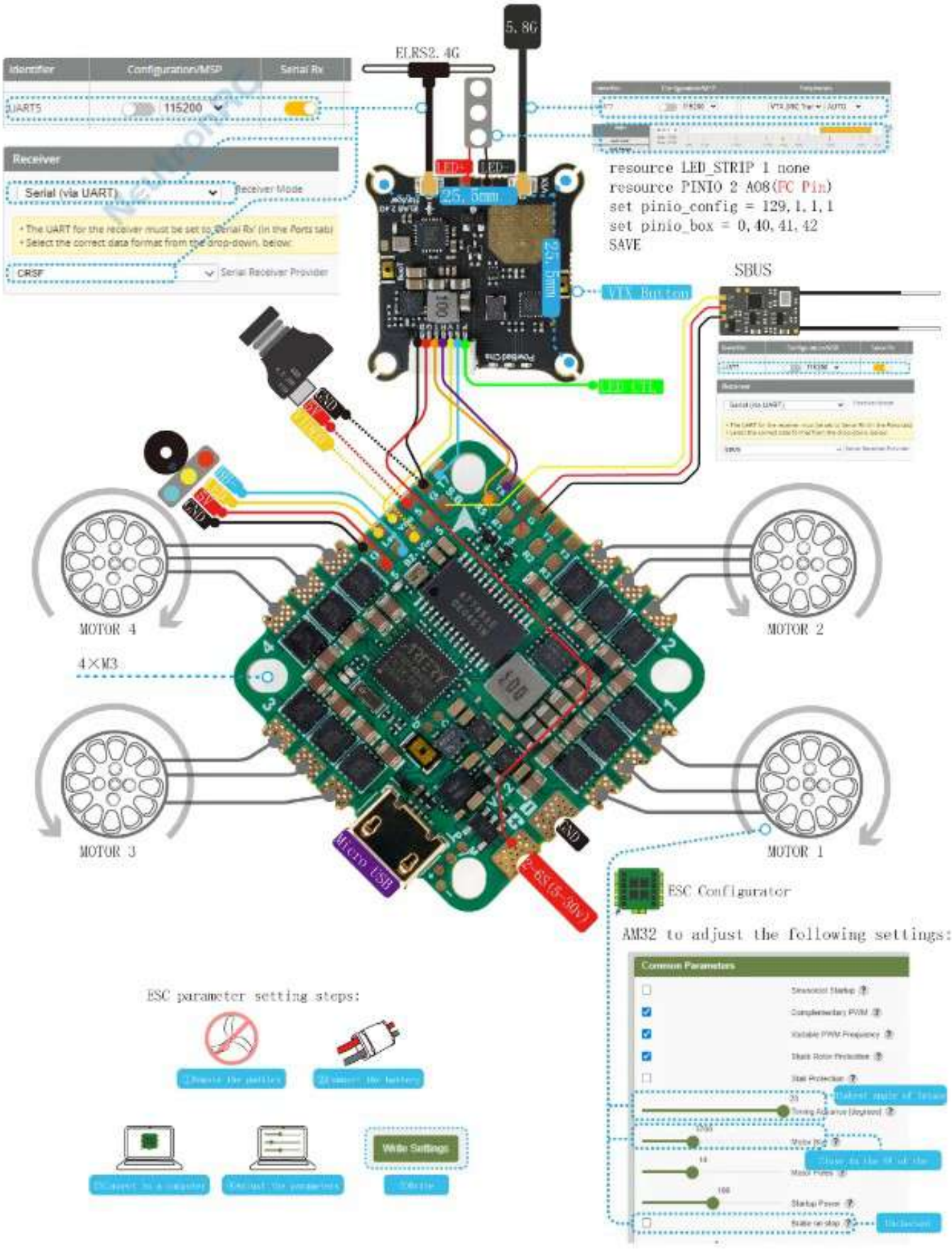
Under the combination of high-definition image transmission, complete the configuration of LED strip light by modifying the CLI

(length does not exceed 600mm)

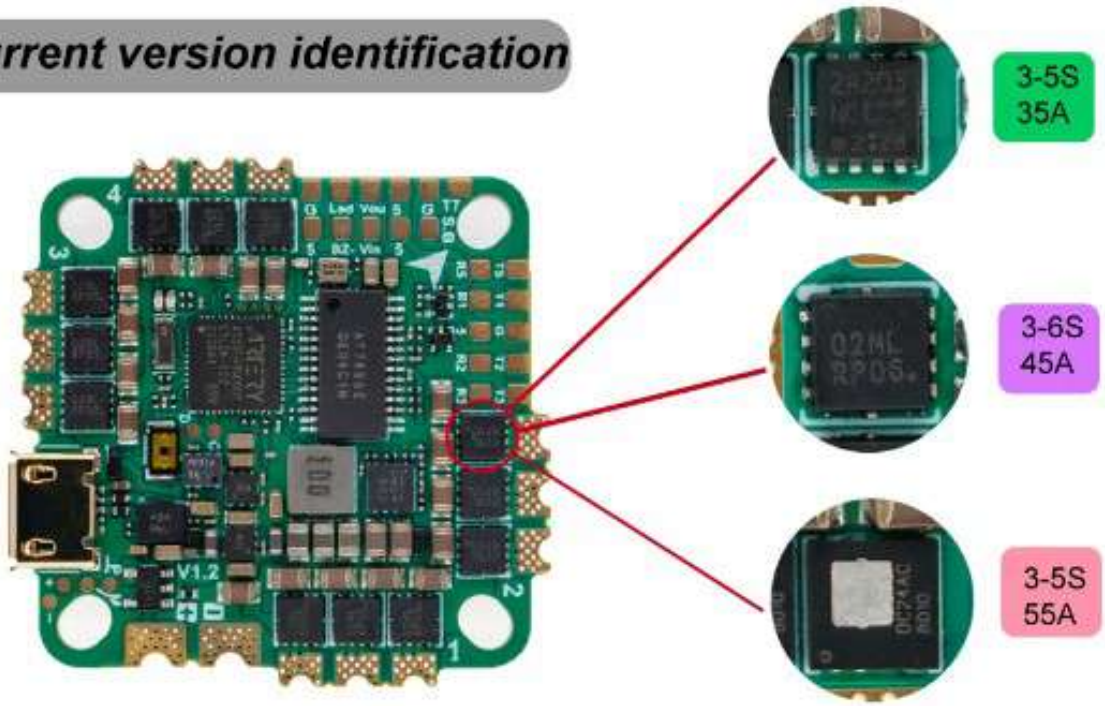
```
resource BEEPER 1 none
resource PINIO 2 C15
set pinio_config = 129,1,1,1
set pinio_box = 0,40,41,42
SAVE
```


5V
COB
5V
GND
5V
GND
5V
GND
MOTOR 4
MOTOR 2
MOTOR 3
MOTOR 1
Micro USB
GND
2-6S (6~30V)

Default wiring diagram



Current version identification



NOTE:
If you have updated firmware,please refer to the flowwing opptions for initial settings to ensure normal work

Board and Sensor Alignment

0 Roll Degrees | 0 Pitch Degrees | -45 Yaw Degrees

First GYRO/ACCEL | CW 0° First GYRO

Default MAG Alignment

Voltage Meter

Warning: Values limited to 25.5V.

Battery	0.3 V	110	Scale
		10	Divider Value
		1	Multiplier Value

Amperage Meter

Warning: Values limited to 63.5A.

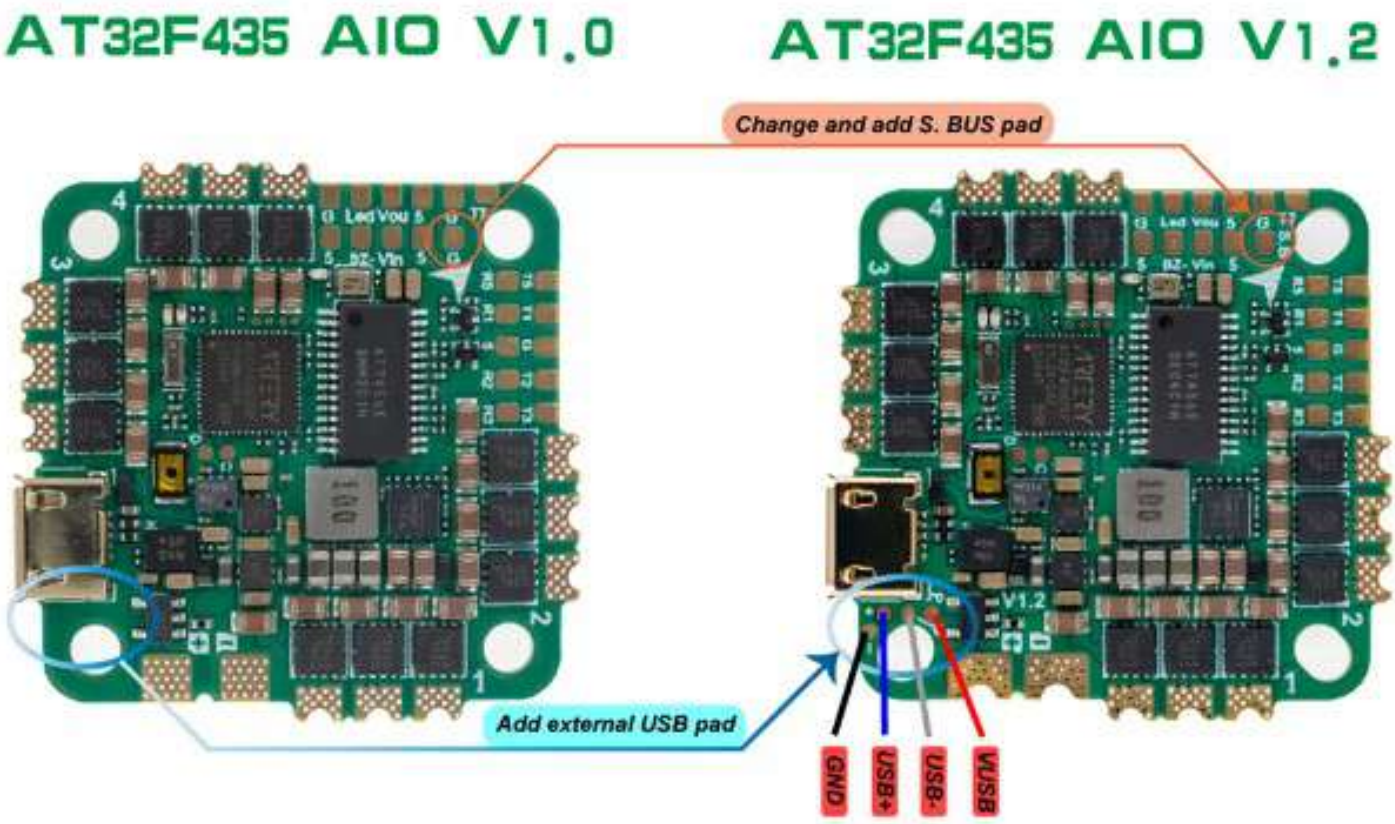
Battery	0.00 A	100	Scale [1/10th mV/A]
		0	Offset [mA]

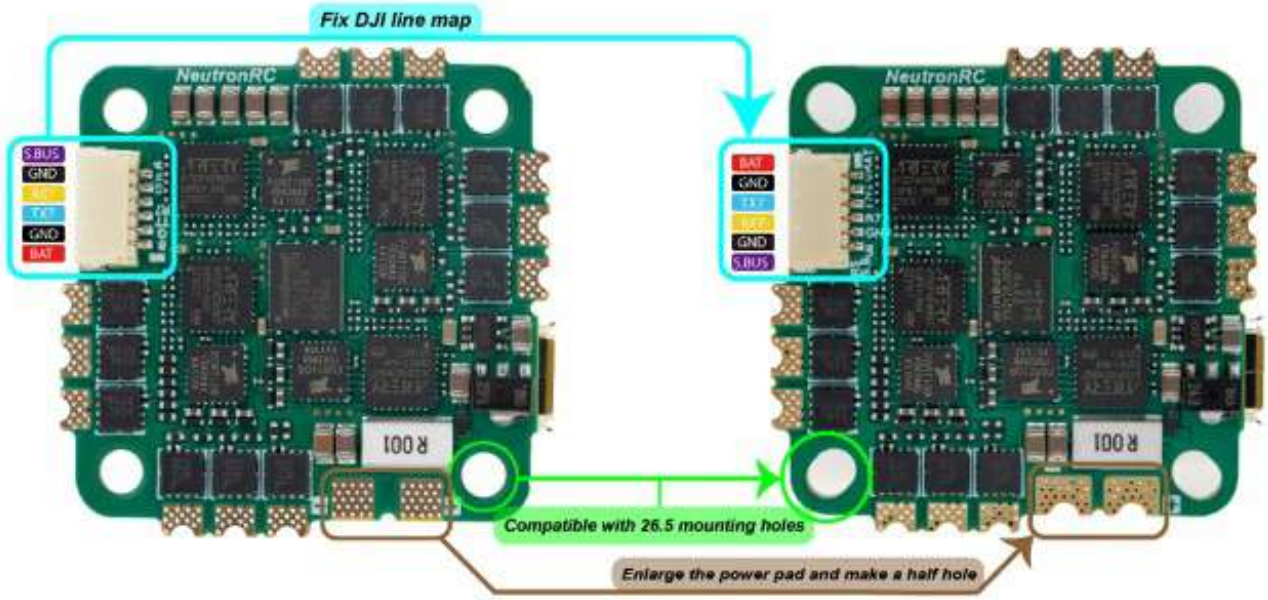
NeutronRC

ATbetaflight

AM32

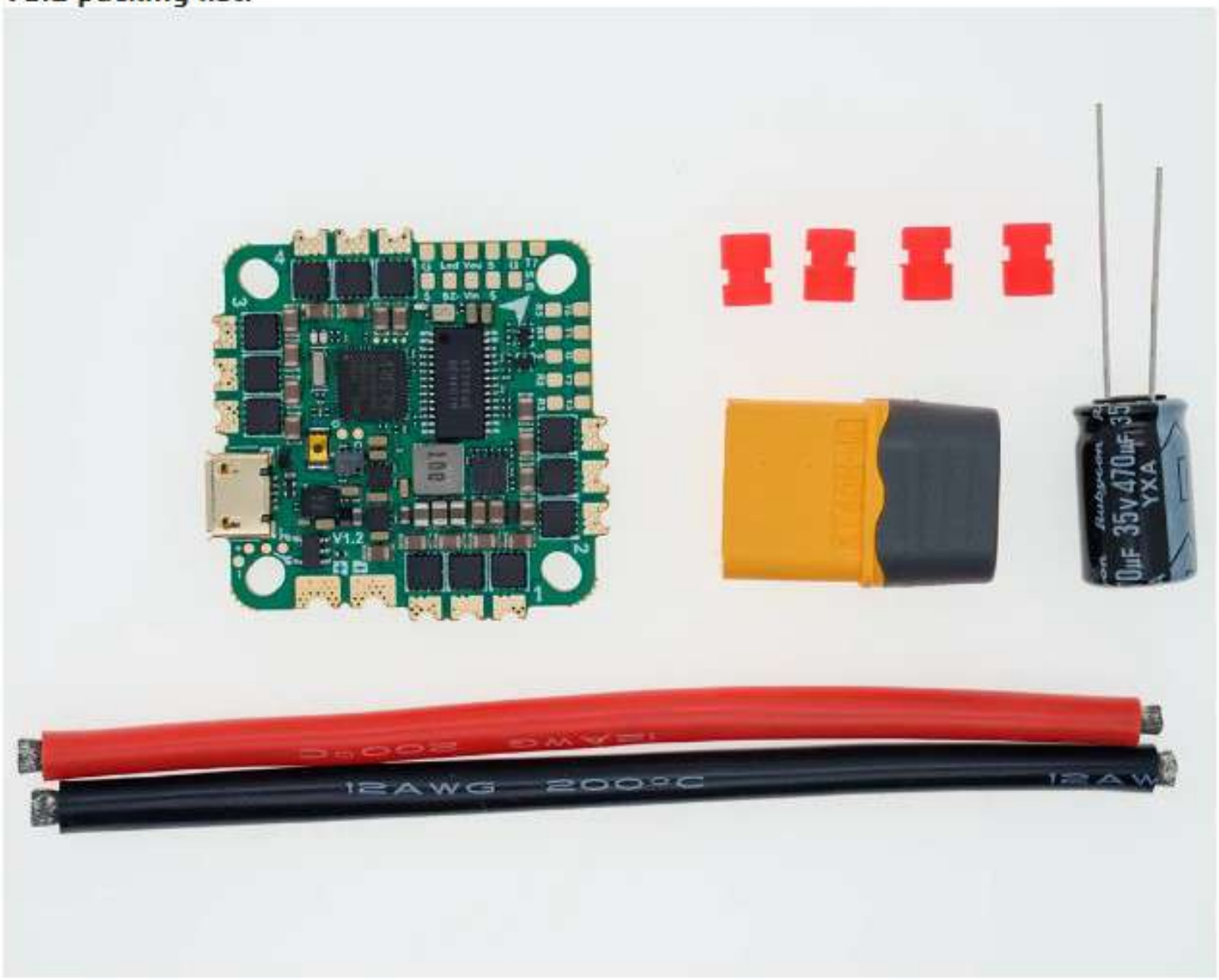
Differences between V1.0 and V1.2



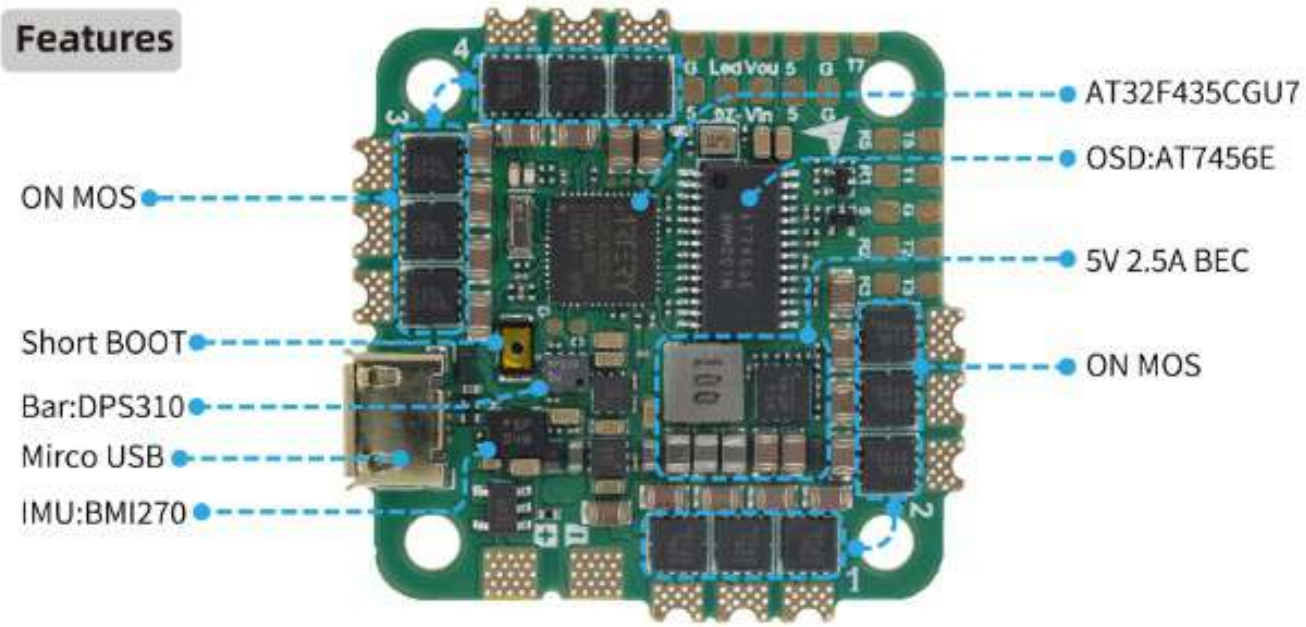


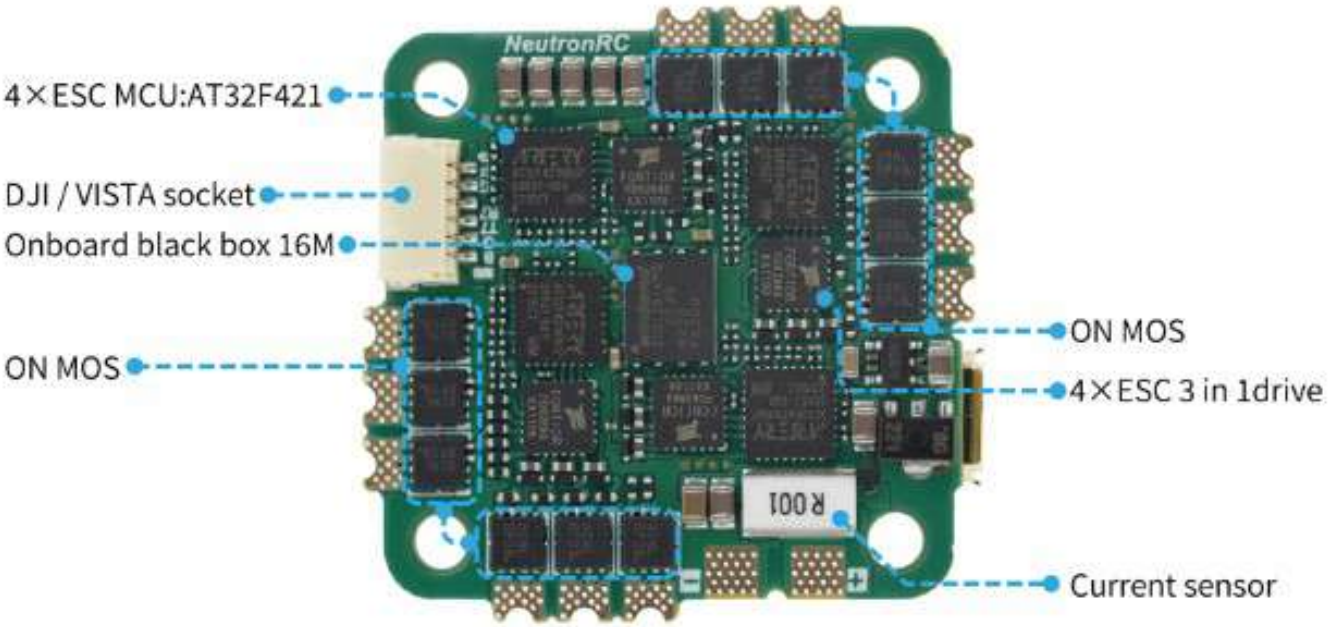
V1.2 Connect with DJI O3/VISTA

V1.2 packing list:



Features





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2. IMU: BMI270 (SPI1) CW=0,YAW = -45
3. OSD: AT7456E (SPI2)
4. Blackbox: SPI=2 Flash 16M
5. Baro: Infineon DPS310(I2C1)
6. 5xUarts(1,2,3,5,7)&1x I2C
7. BEC: 5V 2.0A(Max 2.5A)
8. Support Betaflight(NEUTRONRCF435MINI)
9. Current sensor (Scale 100)&Voltage sensor (Scale 110)
10. 3x LEDs for FC Status & 3.3V and 5V
11. **ESCMCU: AT32F421 120MHz (AM32 Firmware)**
12. FD6288 3in1 driver
13. SH1.0-6pin,DJI/Vista straight plug
14. ONSemi Industrial MOS, low internal resistance and high current
15. Current 45Ax4 ,Max 60A(5S)
16. ESC Firmware: AM32(AM32_AT32DEV_F421)
17. 8-layer 2OZ, 2-order blind via PCB.

Target

- ATbeatflight Firmware: NEUTRONRCF435MINI

Mechanical and Electrical Specs

- **Input Voltage:** 2-6S (5-30V)
- **Mounting:** 25.5x25.5mm w/M3 Grommets
- **Size:** 34x34x7mm
- **Weight:** 8g

Default UART Configuration

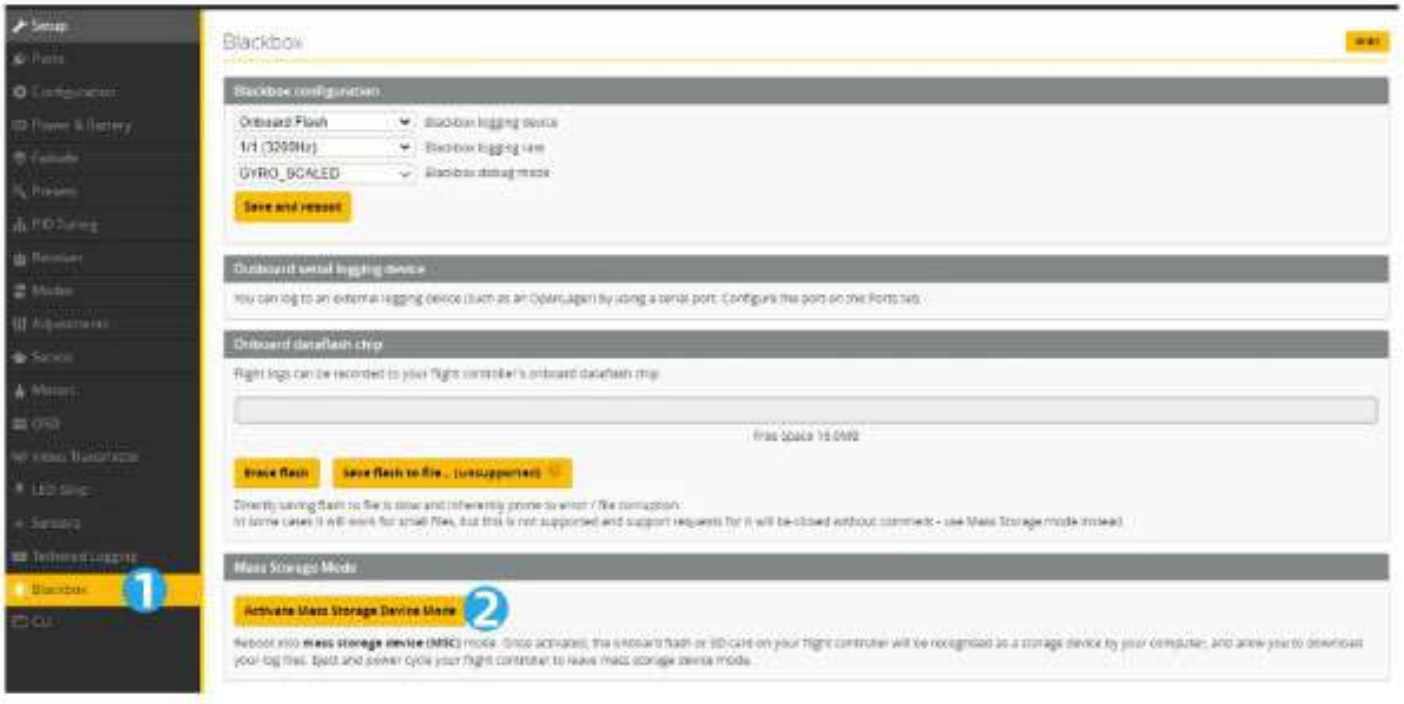
UART 1: NC
UART 2: NC
UART 3: NC
UART 5: S.BUS(DJI /VISTA/O3)
UART 7: DJI/VISTA

Default port

Identifier	Configuration/MSP	Serial Rx	Telemetry Output	Sensor Input	Peripherals
USB VCP	115200		Disabled AUTO	Disabled AUTO	Disabled AUTO
UART1	115200		Disabled AUTO	Disabled AUTO	Disabled AUTO
UART2	115200		Disabled AUTO	Disabled AUTO	Disabled AUTO
UART3	115200		Disabled AUTO	Disabled AUTO	Disabled AUTO
UART5	115200		Disabled AUTO	Disabled AUTO	Disabled AUTO
UART7	115200		Disabled AUTO	Disabled AUTO	Disabled AUTO

Read black box data

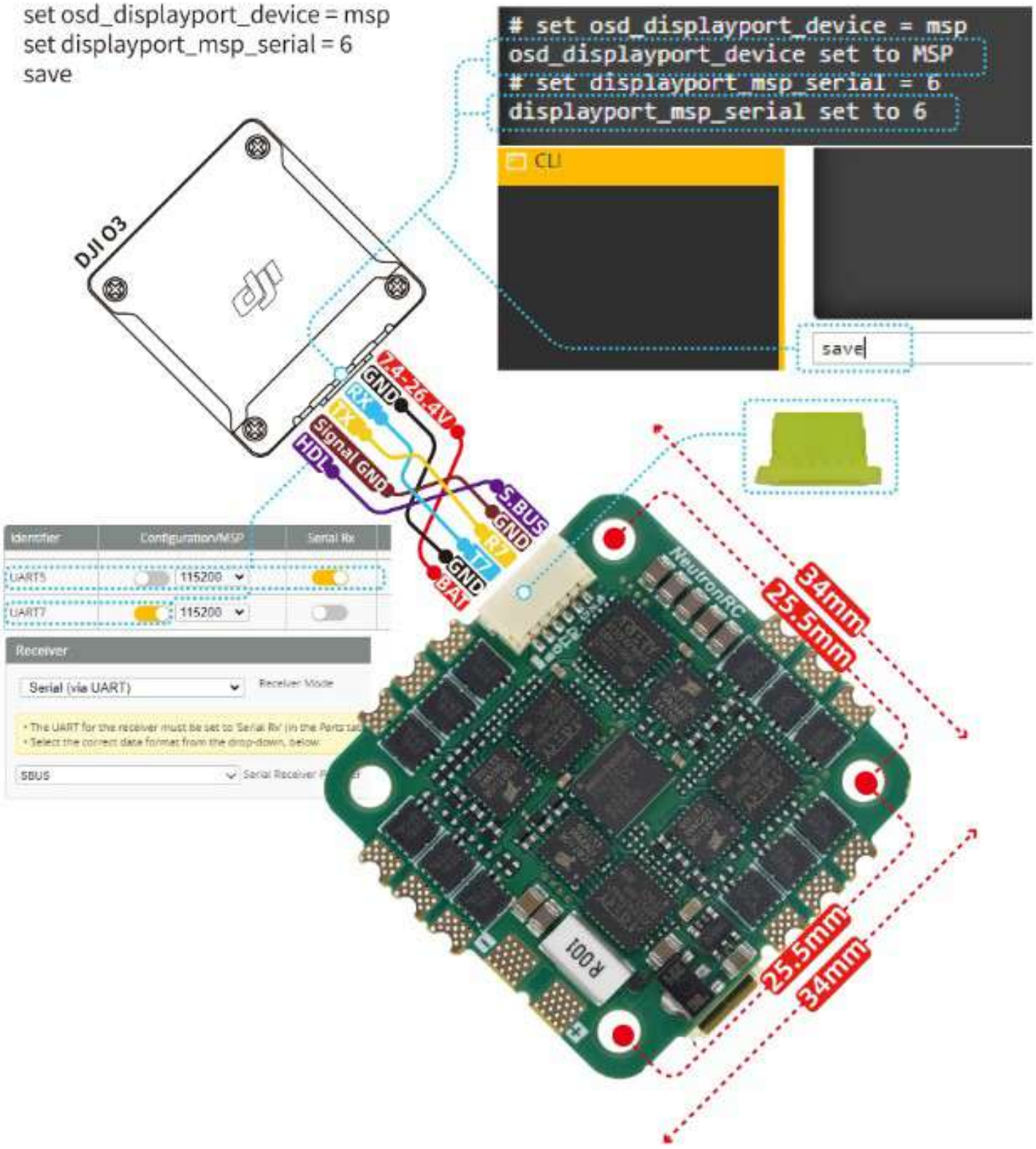
Select the black box option to **activate mass storage device mode**



DJI digital image transmission system

Entering CLI Mode

set osd_displayport_device = msp
set displayport_msp_serial = 6
save

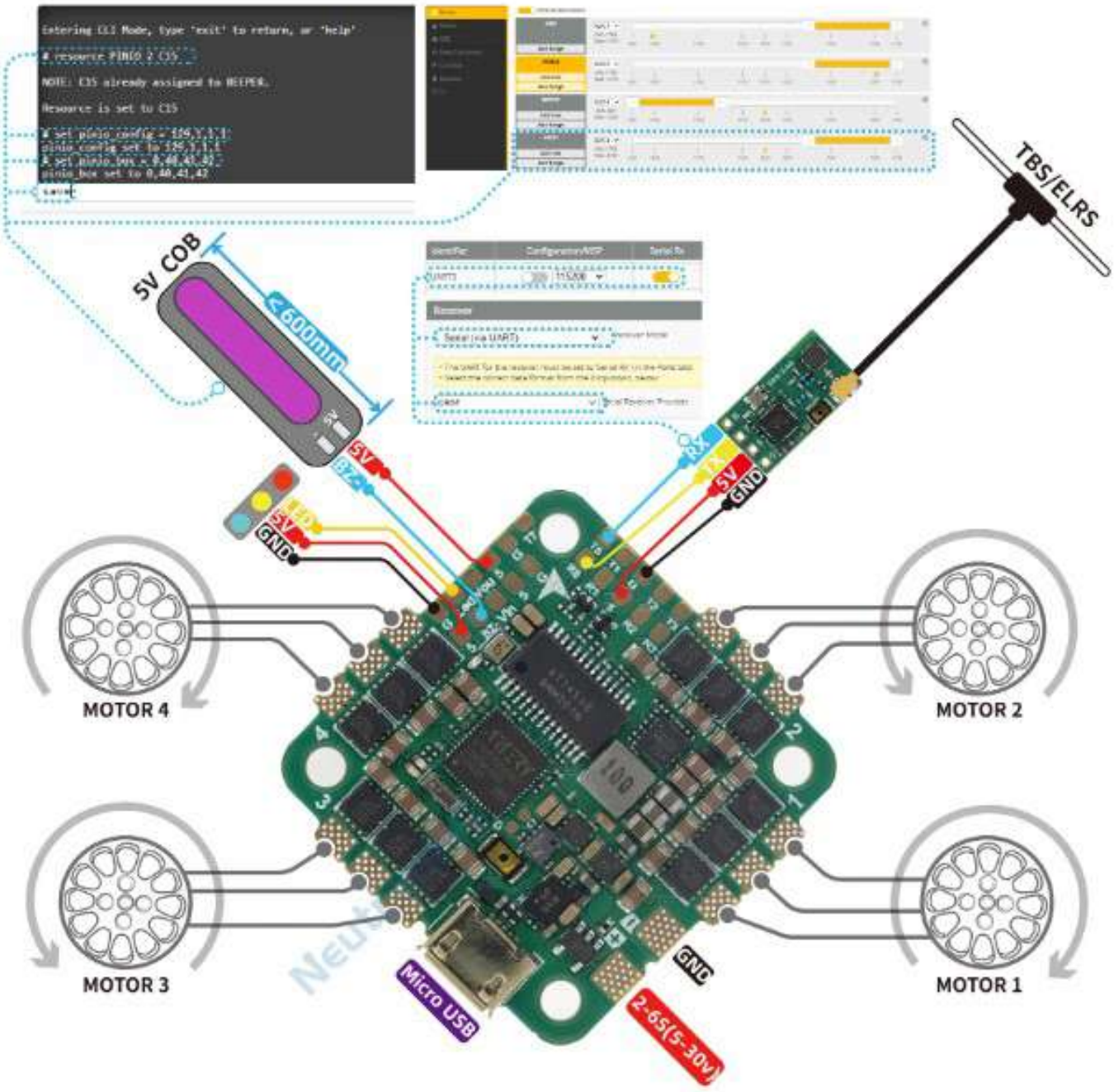


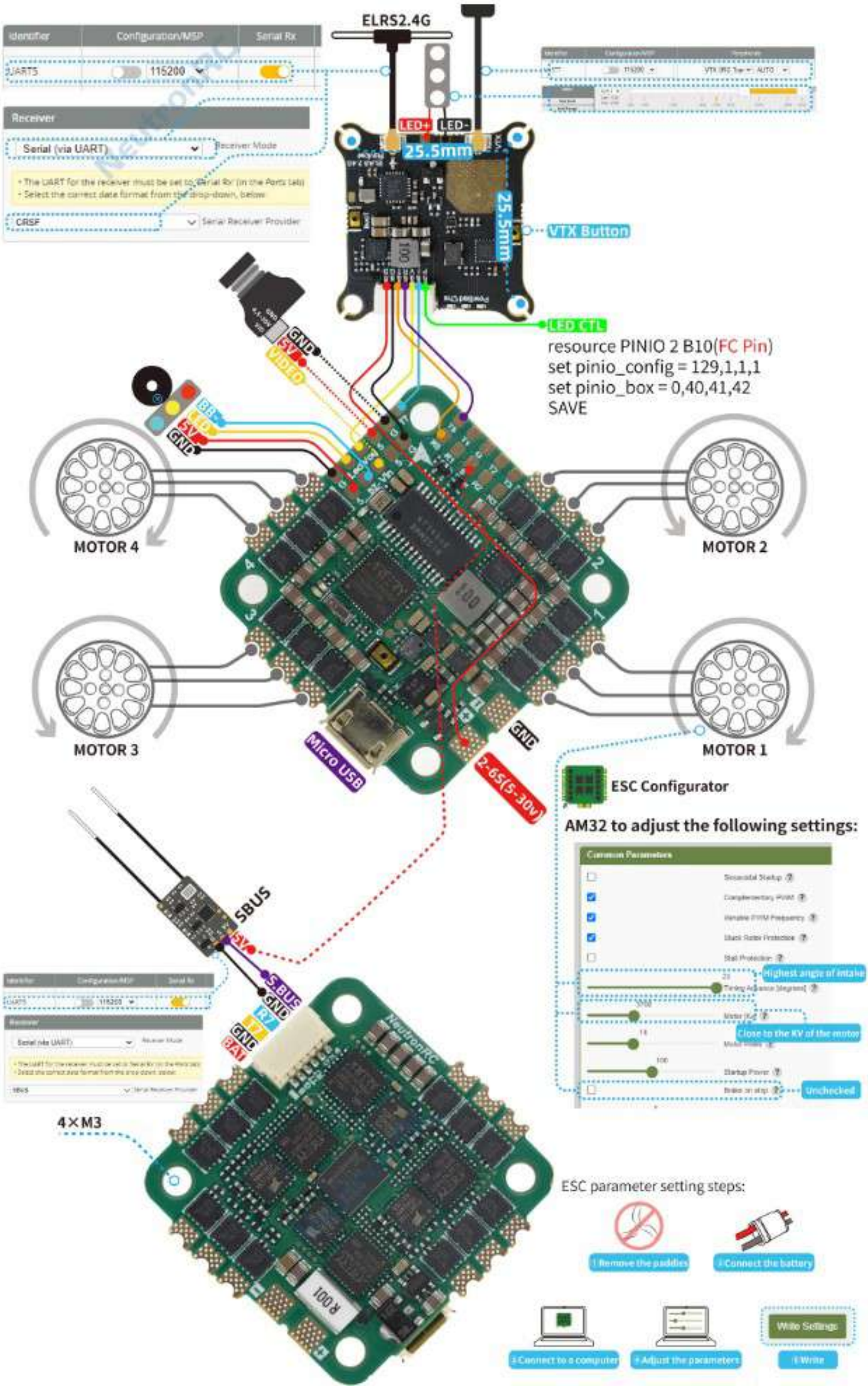
Please note that the Air Unit end is connected strictly according to the wiring diagram, Otherwise, it will cause serious consequences such as burning the Air Unit end.

Please note that the Air Unit end is connected strictly according to the wiring diagram, Otherwise, it will cause serious consequences such as burning the Air Unit end.

Under the combination of high-definition image transmission, complete the configuration of LED strip light by modifying the CLI (length does not exceed 600mm)

resource PINIO 2 C15
set pinio_config = 129,1,1,1
set pinio_box = 0,40,41,42
SAVE




ELRS2.4G
Identifier
Configuration/MSP
Serial Rx
UART5
115200
Receiver
Serial (via UART)
Receiver Mode
CRSF
Serial Receiver Provider
LED+
LED-
25.5mm
25.5mm
VTX Button
LED CTL
resource PINIO 2 B10(FC Pin)
set pinio_config = 129,1,1,1
set pinio_box = 0,40,41,42
SAVE
GND
5V
VIDEO
BB+
LED
5V
GND
MOTOR 4
MOTOR 2
MOTOR 3
MOTOR 1
Micro USB
GND
2-6S(5-30V)
ESC Configurator
AM32 to adjust the following settings:
Common Parameters
Highest angle of intake
Close to the KV of the motor
Unchecked
SBUS
5V
S.BUS
GND
5V
GND
BAT
4×M3
ESC parameter setting steps:
1 Remove the paddles
2 Connect the battery
1 Connect to a computer
2 Adjust the parameters
Write Settings
3 Write

NOTE:
If you have updated firmware,please refer to the flowwing opptions for initial settings to ensure normal work

Board and Sensor Alignment

0 Roll Degrees | 0 Pitch Degrees | -45 Yaw Degrees

First GYRO/ACCEL | CW 0° First GYRO

Default MAG Alignment

Voltage Meter

Warning: Values limited to 25.5V.

Battery	0.3 V	110	Scale
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		1	Multiplier Value

Amperage Meter

Warning: Values limited to 63.5A.

Battery	0.00 A	100	Scale [1/10th mV/A]
		0	Offset [mA]

Blackbox configuration

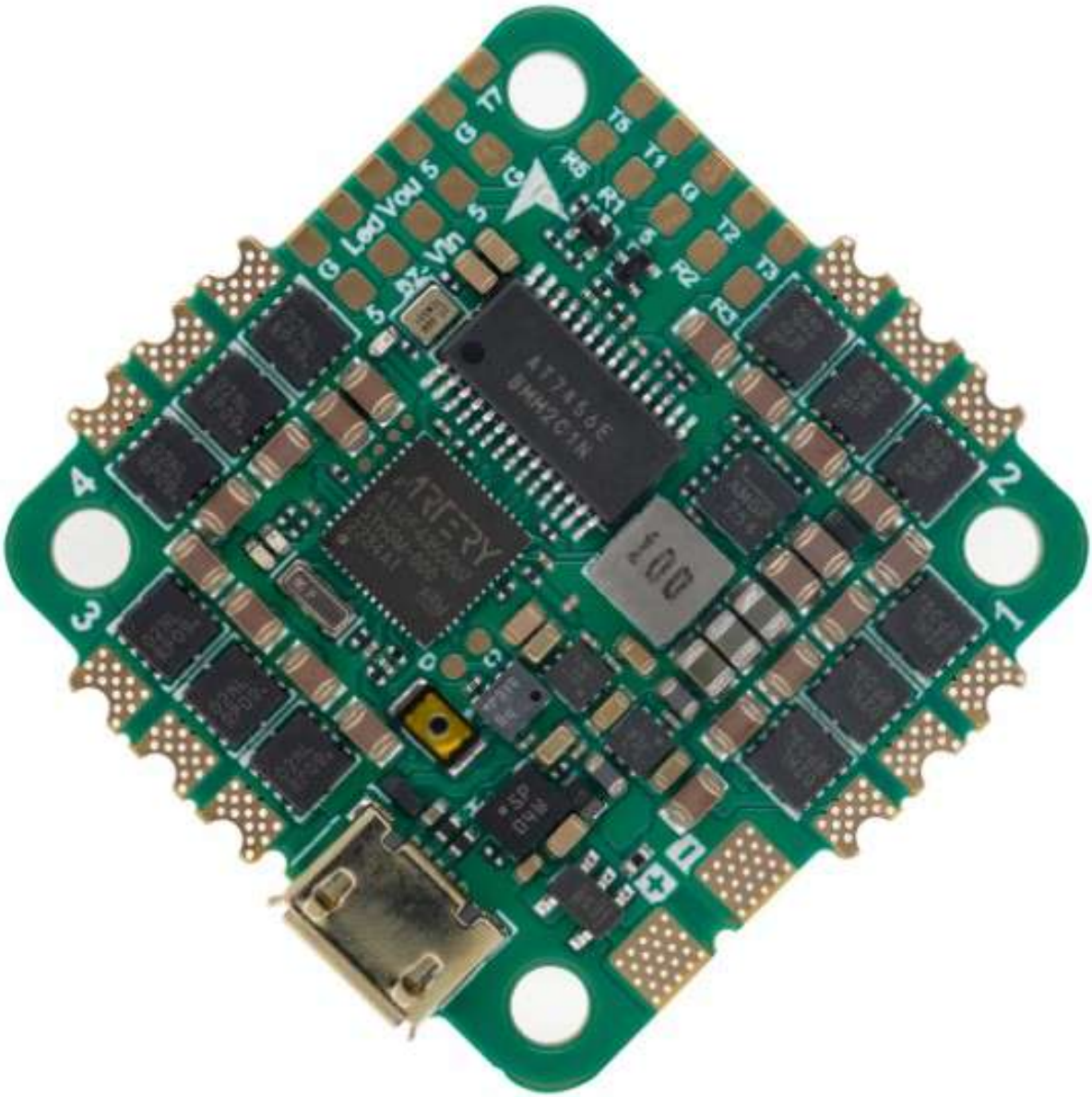
Onboard Flash — Blackbox logging device

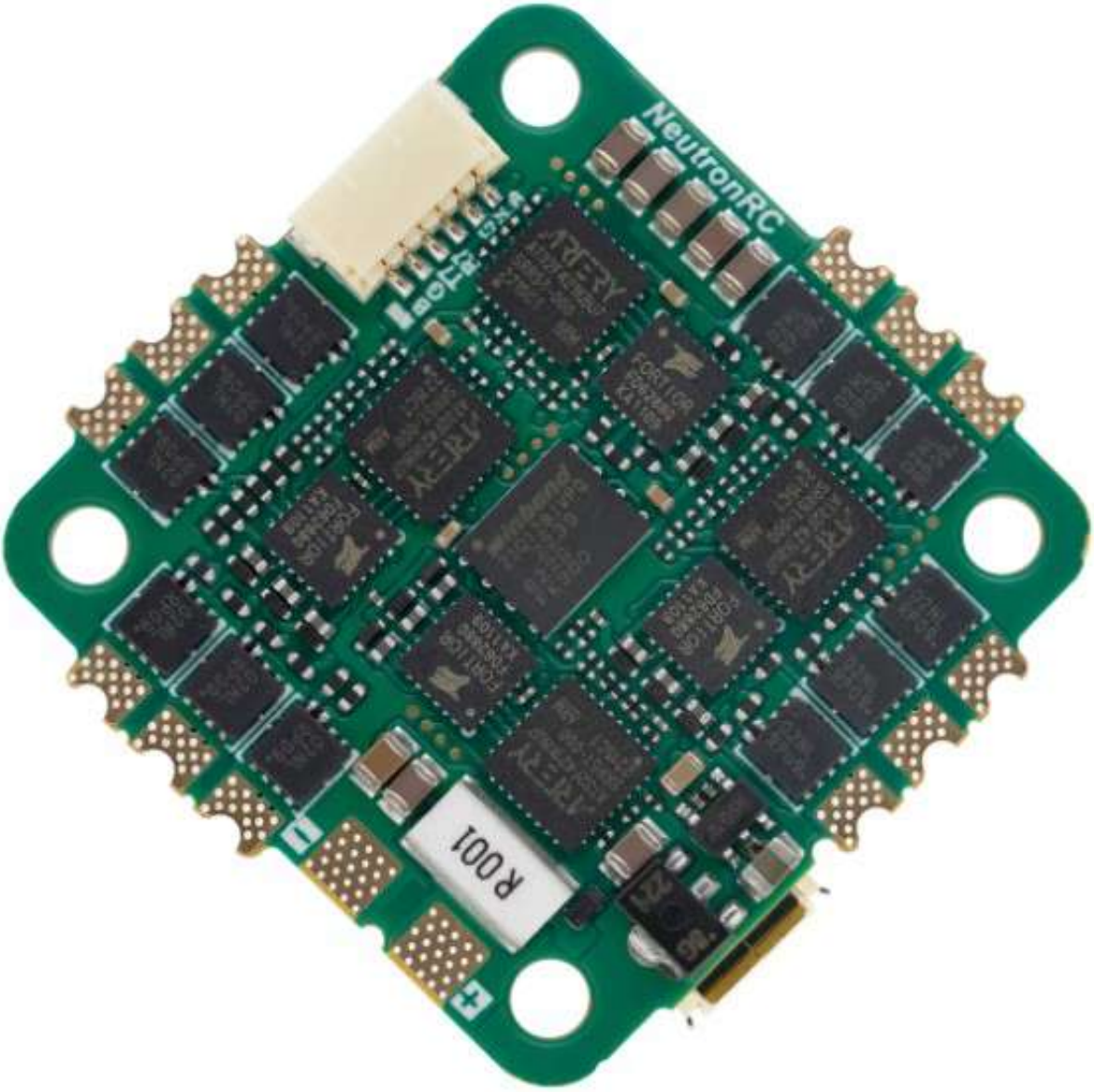
1/1 (3200Hz) — Blackbox logging rate

GYRO_SCALED — Blackbox debug mode

Save and reboot

NeutronRC **ATbetaflight** **AM32**


4
2
3
1
100


NeutronRC
R001

NeutronRC